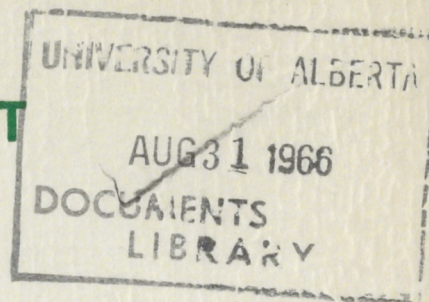


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OF THE



EASTERN ROCKIES FOREST
CONSERVATION BOARD

FOR THE
FISCAL YEAR

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ANNUAL REPORT

of the

EASTERN ROCKIES FOREST CONSERVATION BOARD

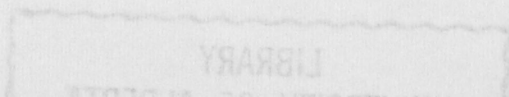
for the

FISCAL YEAR

1965-66

Calgary, Alberta

March 31, 1966



ANNUAL REPORT

1966-67

EASTERN FOREST CONSERVATION BOARD

for the

1966-67

FISCAL YEAR



March 31, 1968

Calgary, Alberta

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EASTERN ROCKIES FOREST CONSERVATION BOARD
514 - 11 Ave. S. W.
Calgary, Alberta

July 25, 1966

The Honourable Maurice Sauve
Minister of Forestry
Ottawa, Ontario

Sir:

I have the honour to submit herewith the Annual Report of the Eastern Rockies Forest Conservation Board for the fiscal period April 1, 1965 to March 31, 1966, pursuant to the provisions of the Eastern Rocky Mountain Forest Conservation Act of 1947. I am

Your obedient servant

J.R.H. Hall
Chairman

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EASTERN ROCKIES FOREST CONSERVATION BOARD
514 - 11th Ave. S. W.
Calgary, Alberta

July 25, 1966

The Honourable Henry A. Ruste
Minister of Lands and Forests
Edmonton, Alberta

Sir:

I have the honour to submit herewith the Annual Report of the Eastern Rockies Forest Conservation Board for the fiscal period April 1, 1965 to March 31, 1966, pursuant to the provisions of the Eastern Rocky Mountain Forest Conservation Act of 1947. I am

Your obedient servant

J.R.H. Hall
Chairman

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EASTERN ROCKIES FOREST CONSERVATION BOARD

BOARD MEMBERS

Chairman and Provincial Member	J.R.H. Hall
Provincial Member	A.T. Baker, B.A.
Federal Member	J.D.B. Harrison, D.C.M., M.Sc.F., LL.D.

PRINCIPAL OFFICERS

Chief Forester	W.R. Hanson
Secretary	J.M. Marshall

INTRODUCTION

The Board continued its work of policy making and top level planning under its Terms of Reference as set out in the Eastern Rocky Mountain Forest Conservation Act. Under the Agreement attached thereto, the Alberta Forest Service carried out the management and administration of the Conservation Area within the established policy and according to the programs and guidelines supplied by the Board.

Substantial progress has been made in the watershed research program, reported on briefly herein, which had its inception in a conference on watershed research held in Ottawa in December 1959. Out of this conference grew the present organization for a cooperative watershed management program involving 12 agencies of the Governments of Canada and Alberta, representatives of which comprise the Technical Coordinating Committee and which takes its direction from a Steering Committee based in Ottawa.

This program has drawn the attention of conservationists in both the United States and Europe and reports upon it have been presented to water resource conferences in both continents upon request.

The Board once again is indebted to the Alberta Forest Service and the Department of Forestry, Canada, for work undertaken on the Rocky Mountains Forest Reserve, and to the many Federal and Provincial agencies cooperating with it in the field of watershed research.

ADMINISTRATION

Six meetings of the Board were held during the 1965-66 fiscal year, five in Calgary and one during a field trip at the Saskatchewan Crossing Bungalow Camp on the Banff-Jasper Highway. Minutes of the meetings were duly recorded and copies submitted to the Minister of the Department of Forestry, Canada, and the Minister of the Department of Lands and Forests of the Province of Alberta.

No amendments were enacted affecting the existing agreement between the Government of Canada and the Government of the Province of Alberta during the year under review.

Personnel directly responsible to the Board comprise:

Chief Forester
Secretary
Foresters (2)
Draftsman
Clerk-Stenographer

The above staff is supplemented as required by engaging the services of forestry students during the summer to assist with field work and studies related to watershed management and research, and temporary stenographic and clerical staff during peak work and vacation periods.

Eighty-nine permanent employees of the Alberta Forest Service are assigned to the various positions related to the administration and protection of the Rocky Mountains Forest Reserve, together with 23 lookoutmen who are employed on a seasonal basis. In addition, an average of some 50 persons are engaged on a temporary basis on road construction and maintenance, stand-by fire duty, campground cleanup and other duties. The foregoing are under the jurisdiction of the Director of Forestry.

A summary showing the distribution of the Forest Reserve staff is appended hereto. (Appendix "A")

FOREST WATERSHED MANAGEMENT

Under the Terms of the "Eastern Rocky Mountain Forest Conservation Act" the Board was given the responsibility of safeguarding the watershed values of the three provincial forests lying at the head of the Saskatchewan River, in the area as defined by the Act, with a view to obtaining the greatest possible flow of water in the Saskatchewan River.

The Act directs that the Board shall set policy, plan programs for the protection and conservation of the forest resources, supervise the execution of the programs and arrange for the undertaking of scientific investigations.

Under the Agreement, the Province of Alberta is authorized to execute and administer the programs; therefore, forest-watershed management on the Conservation Area is carried out jointly by the Alberta Department of Lands and Forests and the Eastern Rockies Forest Conservation Board.

Water has become the most important product of this area and watershed management of primary concern. As it was recognized that watershed protection and improvement may be attained along with the utilization of the other resources if good management is applied, a policy of managing the area on a multiple-use basis has been adopted.

In managing the forest resources jointly, the Board and the Alberta Forest Service have made a natural division of responsibility with the Board setting the policy and outlining and supervising designated programs which are carried out by the Alberta Forest Service.

CONSERVATION UNIT GUIDES

One means by which the Board has performed its function is in the writing of Conservation Unit Guides for the use of the Alberta Forest Service.

Each conservation unit comprises a drainage basin with somewhat similar management problems, and its area lies entirely within a single administrative district (ranger district). In most cases the conservation unit coincides with a timber management unit except where the timber units are small. In such cases a conservation unit may comprise two or three timber management units.

The management guide is in two parts, Part I comprising a general outline incorporating features which are common to all management units and descriptions of procedures followed in the individual unit guides. Part II comprises the separate Conservation Unit Guides.

The unit guides are based upon a watershed inventory and are the key to resource management. Watershed conditions are outlined and problems analyzed as a guide to conditions to be attained through efficient management. Thus, the guide serves as a starting point for forest land-use management for the conservation unit for which it has been prepared.

Watershed values are given priority in all cases and the guides are designed to steer management plans and administration towards maintaining good watershed conditions while utilizing other wildland resources.

Although preliminary work on the survey and problem analysis was begun some years ago, the first guide was produced in 1963. Since that time eight units have been surveyed and eight reports written up. In Table I below, the conservation units are listed with letters indicating the timber management units included in each. The years of the field survey and of writing of the report (either the year completed or proposed) are also shown. Because of the importance of the information to management planning, the guides are being finished as soon as practical with the facilities and manpower available.

<u>Conservation Unit</u>	<u>Field Survey</u>	<u>Report</u>
Oldman - C-2	-	1963
Red Deer - B-6	1963	1964
Castle - C-3	1963	1964
Foothills - C-1	1964	1965
South Bow - B-1	1964	1966
Clearwater - R-9	1965	1966
Prairie Creek - R-7	1965)	
Ram - R-8	1965)	1967
Highwood-Kananaskis - B-2	1965)	
Ghost - B-3	1966)	
Fallen-Burnt Timber - B-4 & B-5	1966)	
North Saskatchewan - R-6	1966)	1968
Lower Saskatchewan - R-5	1967)	
Chungo-Brazeau - R-3	1967)	
Cardinal-Brazeau - R-4	1967-1968)	1969 or 1970
Nordegg-Baptiste - R-2	1968	
R-1	1968	

MANAGEMENT BY THE ALBERTA FOREST SERVICE

As has been mentioned in previous annual reports the activities of the Alberta Forest Service are reported on in more complete detail in the Annual Report of the Department of Lands and Forests and are not segregated between the Conservation Area and other areas. For this reason, only a brief summary of the activities of the Alberta Forest Service in the Rocky Mountains Forest Reserve is presented herein.

TIMBER MANAGEMENT

The forested region of the Crowsnest, Bow River and Clearwater-Rocky Forests, which constitute the Forest Reserve, have been subdivided into a series of 18 management units for administrative purposes. Division was based on such factors as topography, access, and continuity of timber. Each management unit is administered as a separate entity on the basis of sustained yield management, and production from each unit is controlled by an allowable cut and a cutting program.

To facilitate the principles of sustained yield management the "Quota System", a new system of timber disposal, is presently undergoing implementation in the Province. To date, cutting programs for all management units in the Forest Reserve have been prepared for the Quota System. In addition to controlling the volume of timber extracted from each management unit in the Forest Reserve the Quota System will result in more security for the lumbering industry, a more stable lumbering economy, and increased utilization.

FOREST MANAGEMENT PLANNING

Multiple use management plans have been completed by the Alberta Forest Service for the following units:

Units B-7, 8 & 9, in the Bow River Forest,
Units C-2 & C-3 in the Crowsnest Forest.

RECREATION PLANNING

A continued program of evaluating and upgrading existing recreation areas in the Forest Reserve to meet public needs is being carried out.

SILVICULTURE
SECTION

Silvicultural projects completed by the Alberta Forest Service within the Conservation Area during the year under review

are outlined below:

<u>Project</u>	<u>Total</u>
Land scarified	1,890 acres
Land seeded	1,145 acres
Conventional 3-0 planting	173,600 seedlings
Container planting	10,000 seedlings
Hand thinning	258 acres
Mechanical thinning	1,050 acres

GRAZING

The annual grazing summary hereunder is compiled from information submitted by the Superintendents of the Crowsnest, Bow River and Clearwater Forests and from the Forest Management Branch, Alberta Forest Service.

SUMMARY

The number of livestock grazed under permit in the Forest Reserve decreased by 4.76 per cent. There was a slight increase in the number of sheep. Actual use went down from 95,957 Animal Unit Months in 1964 to 88,264 Animal Unit Months in 1965 due to lower stocking rates in many of the allotments and the early removal of cattle from the Reserve due to early snowfall.

During the year, 307 permits were issued which is four less than last year's number. The revenue amounted to \$64,655.80, which is \$12,721.37 less than last year's revenue. The substantial reduction in the revenue is due mainly to the reduction in the rate of grazing rental and to a lesser extent to the reduction in the number of livestock using the Reserve.

A summary of domestic animals grazed under permit as compared with the previous year is shown in Appendix "B".

RANGE
SURVEY

Satisfactory progress was made on the range survey program. Eight range allotments in the Crowsnest Forest were re-surveyed.

During the year one stock-watering development was carried out. Six permanent transect clusters were read.

RANGE
CONDITION

The general condition of the range in the Crowsnest Forest was quite satisfactory. There were some areas which were overgrazed.

In one instance cattle were removed one month ahead of time to avoid over-utilization. Underutilization was noticed in many areas which can very easily be classified as unusable or as areas not to be used by cattle.

Range condition was satisfactory in general in the Bow River Forest. Overgrazing has been noted in many places due to overstocking in some cases and poor distribution of cattle in others. Under-utilization has been mainly due to lack of even distribution of cattle in the allotments.

Generally, range condition in the Clearwater Forest was fairly good. Holbrook Allotment was not used due to larkspur poisoning, and Nordegg River Allotment was not used because of a lack of people interested in grazing in that area. Overgrazing was noticed in Elk-Idlewilde, mainly due to poor distribution of cattle in the allotment. Corrective measures were recommended in the form of a reduction in the preference quota. In this forest, underutilization is not generally considered as poor management due to the reduced (50%) stocking rate.

RANGE
IMPROVEMENTS

forest.

One stock-watering dugout was completed in the Crowsnest Forest and two water troughs are proposed for installation in the same

Permittees were encouraged to take advantage of the assistance offered by P.F.R.A.

Drift fences were completed on eight locations. Five Texas gates were installed during the year.

About 150 acres were sprayed with a mixture of 2,4-D and Torton to control scabiosa and larkspur in the Jumping-pound Allotment. A few sample plots were also sprayed in the Holbrook and Saunders Allotments but with little success.

STOCK ASSOCIATIONS

Cooperation between stockmen and forestry personnel continued to be good. Forest officers attended the meetings of the various associations, discussing and explaining the management plans to the members. Decisions were generally made in consultation with the associations.

GAME PROTECTION

In the Crowsnest Forest, Sentry-York Allotment continued to be closed to grazing for the purpose of supplying pure water to the town of Blairmore. Glacier Creek Allotment has also been closed to live-stock. Wherever competition is noted in game winter range areas, the forest officers and permittees are asked to avoid those areas and not to salt them. There is the perennial problem of elk population in Bob Creek and Spring Creek Allotments. The Director of Fish and Wildlife has been requested to check the increase in elk population with a view to taking remedial action.

Ya-Ha-Tinda Ranch, Eagle Creek Watershed, and the whole of the Kananaskis district in the Bow River Forest, continued to be closed to domestic livestock grazing.

White Goat and Siffleur wilderness areas, and Forty-Mile and Kootenay Plains areas in the Clearwater-Rocky are also closed to domestic livestock. In addition, wherever grazing is permitted the stocking rate is limited to 50 per cent of the grazing capacity.

ADMINISTRATIVE STUDIES

The review of the system of transect clusters and exclosures was continued during the summer. During the year seven exclosures were established and broken-down fences were repaired.

Educational programs carried out by the Alberta Forest Service for the benefit of the forest rangers and land use officers have improved the understanding of the field staff in range use and management.

Occurrence between the two and for the
 seasonal continued to be good. Forest
 officers attended the meetings of the various
 associations, discussing and explaining the management plans to the residents.
 decisions were generally made in consultation with the associations.

In the Crowned Forest, 2500-3000
 Alignment continued to be closed to grazing
 for the purpose of supplying pure water to the
 town of Blenheim. Otatar Creek Alignment has also been closed to live-
 stock. Wherever competition is noted in game winter range areas, the forest
 officers and permittees are asked to avoid those areas and not to sell them.
 There is the perennial problem of elk population in the Crowned Forest and Spring
 Creek Alignment. The Director of Fish and Wildlife has been requested to
 check the increase in elk population with a view to taking remedial action.

Yakima-Lima Ranch, Eagle Creek Watershed
 and the whole of the Klamath district in the Bow River Forest, continued
 to be closed to domestic livestock grazing.

White Goat and Ziffner wilderness areas
 and Forty-Mile and Kootenay Plains areas in the Clearwater-Rocky are also
 closed to domestic livestock. In addition, wherever grazing is permitted
 the stocking rate is limited to 20 per cent of the grazing capacity.

The review of the system of insect control
 and exclusion was continued during the
 summer. During the year seven exclusions
 were established and broken-down fences were repaired.

Educational programs carried out by the
 Forest Service for the benefit of the forest ranger and land use
 officers have improved the understanding of the field staff in range use and
 management.

FOREST AND WATERSHED RESEARCH

Forest Research

As in the past, the Board continued to receive generous support and assistance in planning and conduct of research from the Department of Forestry, Forest Research Laboratory, Calgary, Alberta. A concise report of the activities of the Department is outlined hereunder:

SILVICULTURE AND ECOLOG- ICAL RESEARCH

The Department of Forestry program of regeneration silviculture and associated autoecological studies continued in the Crowsnest and Bow River Forests. Results of comprehensive planting trials have provided important data on the effects of site, valley microclimate and seedling microclimate in relation to plant survival and growth. Survival of high quality planting stock set out in 1964 has been generally poor. An assessment of first and second-year results is in preparation.

The results of natural regeneration that followed post-logging scarification and pre-logging scarification continue to show decreases in stocking of coniferous species. Some seedlings, however, are releasing and it is hoped that one or two more years will be sufficient to ensure adequate establishment. The initial trials of pre-scarification made by the Alberta Forest Service have provided good material and field conditions for further autoecological research.

FOREST INSECT AND DISEASE CONDITIONS

An assessment of forest insect and disease conditions in the Rocky Mountains Forest Reserve is conducted each year as part of a general survey of the Alberta Region. Research pertaining to particularly destructive organisms is conducted at the regional office in Calgary, the Kananaskis Forest Experiment Station and the Mount Eisenhower field station in Banff National Park. As conditions warrant, control measures are recommended to the Alberta Forest Service.

Cool and wet weather throughout the area during the growing season of 1965 appeared to contribute to a pronounced decline in populations of defoliating insects while favoring the incidence of foliage diseases.

The most noteworthy pests in the Conservation Area were the Aspen Leaf Miner, wood borers in trembling aspen and the poplar and willow borer in willow.

Among the forest diseases, dwarf mistletoe, Atropellis canker and Armillaria root rot continued to cause extensive damage to lodgepole pine. Also, stem rusts, needle rusts, needle casts and various foliage diseases of broad-leafed trees were quite prevalent.

The general situation with regard to both forest insects and diseases is not considered to be deteriorating.

Further information on specific insects and diseases may be obtained from:

The Annual Report of the Forest Insect and Disease Survey.
Annual District Reports of the Forest Insect and Disease Survey, Alberta Region.

The above reports are available from the Forest Research Laboratory, Department of Forestry, 721 Public Building, Calgary, Alberta.

Watershed Research

COOPERATIVE RESEARCH PROGRAM

The Cooperative Research Program, started at the request of the Board to serve watershed management, has now completed its fourth year under the direction of a

Steering Committee based in Ottawa. Twelve agencies of the Governments of Canada and Alberta are participating actively in the program. The Chief Forester of the Board continued to serve as Chairman of the Technical Coordinating Committee and the Board staff carried out their assigned parts of the program as outlined elsewhere. The Department of Forestry continued to provide the research coordinator.

The ultimate purpose of this research program is the improvement of watershed management so as to bring about greater benefits to the people of Canada. A broad field of investigation is encompassed. Determining and testing of methods for improving, or at least maintaining, the yield of good quality water in a reasonably even flow, is an ultimate objective. Before that can be done there is need for

calibrating the research basins, gathering basic data and carrying out studies to give an understanding of the factors affecting the hydrology of mountain lands.

The work of this program, which had its inception in 1962, but actually got under way in 1963, has made most progress in the calibrating of research basins, establishing a meteorological and hydrometric network over the Saskatchewan Headwaters, gathering of basic data and the initiation of some fundamental research by reconnaissance and plot studies.

Not of direct concern to this program, but of importance to the study of water, is the establishment of the International Hydrologic Decade. It is gratifying to note that the basin studies of this program have been approved as part of the Decade program.

During the past year the program was mostly one of continuation rather than initiation. There was an enlargement of several of the projects and both professional and technical staff assigned to the program, either on a full or part-time basis, was increased. For instance, the Meteorological Network was expanded into the National Parks with the Parks Service taking an active part in the gathering of meteorological data in the high mountain area.

Board staff continued to take an active part in the program, both by way of investigations and the performing of services to support the research as outlined hereunder:

APPLIED RESEARCH

The watershed management research program encompasses steps to apply the results of research to watershed management. The

Board has accepted the responsibility for this part of the program. Some accomplishments can be reported in two projects; a reconnaissance study of snowpack accumulation and melt, and a trial in delay of snowmelt in the alpine zone.

The apparent effect of natural shade upon snowmelt, and thus upon the timing of the runoff, led to a decision to study the disappearance of the snowpack under various forest covers and on different aspects. The heavy snow accumulation in the Castle River and the short high peak flow in late spring led to the choice of this basin for the study.

accumulation at different elevations and under differing forest covers observed. The disappearance of the snowpack was observed throughout spring and recorded for different locations under open over-mature spruce in clear-cut patches. Both north and south exposures were observed.

Observations over three years led to the following conclusions: (1) The snowpack was greatest in the openings; (2) Snow disappearance was latest in the small openings of the old spruce stands which were pock-marked by openings of about one tree length in width earliest in the clear-cut areas; (3) Snow disappearance was earlier on south exposure with less delay due to shade.

The observations made in this study have been very useful in making recommendations for the reservation of timber on high elevations for purposes of delaying snowmelt and for cutting patterns on some high elevation timber on the West Castle. On the basis of the findings a plan has been set up to determine improvement in snow management by thinning up a stand of Engelman spruce. Strips and patches are not to exceed 100 feet across and not more than 40 per cent of the volume will be removed. The effect upon snowmelt retardation will be observed.

An alpine site on Plateau Mountain at an elevation of about 7,500 feet was selected to try to determine the effect of snow fencing in accumulating the snow in deep drifts and thus to delay melt. Preliminary trials showed that a barrier made of two tiers of ordinary slatted snow fence could be constructed to withstand the high winds. Drifts of about twelve feet in depth were collected to the leeward side. The snow in the drifts melted slowly in the cool atmosphere of this altitude and disappeared about a month later than in the normal pack.

A project is now set up in the same location in which a small basin is surrounded on the windward side with about 600 feet of snow fences of the type developed in the preliminary trials. A stream gauge is constructed at the outlet of the basin to record the runoff and precipitation gauges and thermometers are set up to provide a record of climate. The snowmelt-runoff characteristics of alpine locations will be studied and the effect of drift accumulation upon delayed runoff will be checked.

SUPPORTING SERVICES

Supporting the actual research are several Federal and Provincial organizations including the Board staff. The Board forester in charge of research fills an important role in designing and laying out access roads and trails to the various research projects and supervising their construction and maintenance to conservation standards. Although the main access roads to the Marmot and Streeter research basins were constructed previously, considerable time was required on additions and maintenance during the past year.

During the past year the Board's research forester was also instrumental in the selection of a lodgepole pine research basin, having taken the lead in the initial selection of candidate basins from aerial photos and maps. In the final selection he was responsible for assessing access and vegetative cover.

Note: Copies of the Third Annual Report of the Technical Coordinating Committee on Watershed Research may be obtained by writing to the Chairman of the Committee - 514 - 11th Ave. S.W., Calgary, Alberta.

*** *****

FOREST PROTECTION

A total of 25 forest fires was recorded in the Rocky Mountains Forest Reserve during the 1965 calendar year compared with 43 during the preceding year.

Area burned amounted to 10.64 acres compared with 115 acres during 1964.

Fires by Cause

	Total Fires		Per Cent	
	1965	1964	1965	1964
Lightning	11	11	44.0	25.6
Campers	7	13	28.0	30.2
Smokers	2	8	8.0	18.6
Industrial	Nil	1	Nil	2.3
Public Projects	1	2	4.0	4.7
Miscellaneous Causes	4	8	16.0	18.6
	<u>25</u>	<u>43</u>	<u>100.0</u>	<u>100.0</u>

Fires by Forest

	Number	Area Burned
Bow River Forest	6	8.64 acres
Crowsnest Forest	12	2
Clearwater Forest	7	Spot
	<u>25</u>	<u>10.64 acres</u>

UTILIZATION OF RESOURCES

FOREST PRODUCTION

Statistics on timber licenses, timber permits and production of lumber and related products in the Rocky Mountains Forest Reserve,

as reported by the Alberta Forest Service for the year under review are noted hereunder:

Number of Timber Licenses offered for sale	3
--	---

Number of Timber Licenses sold	3
--------------------------------	---

Number of Timber Licenses granted	1
-----------------------------------	---

Volume of Timber offered for sale or granted:

Coniferous 8,756,000 f.b.m.

Coniferous 5,700,000 Lin. ft.

Number of Special Timber Permits issued	1
---	---

Number of Miscellaneous Timber Permits issued	258
---	-----

Number of Active Timber Licensees	72
-----------------------------------	----

Production of Lumber and Related Products:

Lumber (feet board measure)	52,228,682
-----------------------------	------------

Railway ties (pieces)	38,262
-----------------------	--------

Round Timber (lineal feet)	8,207,571
----------------------------	-----------

Lath (pieces)	1,405,100
---------------	-----------

Slabs and Fuelwood (cords)	461
----------------------------	-----

Christmas Trees (number)	5,034
--------------------------	-------

Trees for transplanting (number)	65
----------------------------------	----

NATURAL GAS AND OIL DEVELOPMENT

During the year 1965-66 eight new well sites and access roads were constructed.

In addition one flow line and two heater sites were also constructed. Companies

involved were Shell Canada Limited, Imperial Oil Enterprises and Tenneco Oil and Minerals Limited.

CONSTRUCTION AND MAINTENANCE

NEW CONSTRUCTION

Progress on new construction carried out by the Alberta Forest Service is reported hereunder:

ROADS A total of 48 acres of right-of-way was cleared for new roads and 9,000 lineal feet of new grade was constructed. All major projects which were programmed for the year were completed.

BRIDGES On the Forestry Trunk Road seven replacement bridges were constructed during the year and three bridges were replaced by large multiplate culverts.

A 28-foot precast concrete bridge was erected across Radiant Creek. A 38-foot precast concrete bridge was placed across Elk Creek No. 1. A 28-foot precast concrete bridge was erected across Elk Creek No. 2. A 28-foot precast concrete bridge was placed across Seven Mile Creek No. 1. A 28-foot precast concrete bridge was erected across Seven Mile Creek No. 2. A 40-foot precast concrete bridge was placed across Fisher Creek. Multi-plate culverts replaced bridges at Seven Mile No. 3, Bread Creek and McCue Creek.

The Department of Highways replaced the wooden structure across the Clearwater River with a 200-foot steel span. On the Castle River Road, the erection of an 80-foot steel span was started but due to adverse weather conditions was not completed.

During late June and early July, heavy rains fell causing mountain streams to overflow and seriously damaged many roads and bridges throughout the area. A special warrant of \$72,439.00 was obtained by the Alberta Forest Service to institute repairs to roads and bridges in the Bow River and Clearwater-Rocky Forests.

AIRSTRIPS No new airstrips were constructed. In the Clearwater-Rocky Forest, Thunder Lake Airstrip was covered with three inches of black soil and seeded to grass. A water storage dam was constructed at Shunda Airstrip for mud bombing purposes. In the Bow River Forest the Ghost and Red Deer Airstrips were fenced and seeded to grass.

CONSTRUCTION AND MAINTENANCE

NEW CONSTRUCTION

Progress on new construction during the year is reported hereunder.

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On the Forestry Trunk Road seven replacement bridges were constructed during the year and three bridges were replaced by large multiple culverts.

A 35-foot precast concrete bridge was erected across Radiant Creek. A 30-foot precast concrete bridge was placed across Elk Creek No. 1. A 28-foot precast concrete bridge was erected across Elk Creek No. 2. A 28-foot precast concrete bridge was placed across Seven Mile Creek No. 1. A 28-foot precast concrete bridge was erected across Seven Mile Creek No. 2. A 40-foot precast concrete bridge was placed across Fisher Creek. Multi-span culverts replaced bridges at Seven Mile No. 3, Broad Creek and McCue Creek.

The Department of Highways replaced the wooden structure across the Clearwater River with a 200-foot steel span. In the Castle River Road, the erection of an 80-foot steel span was started but due to adverse weather conditions was not completed.

During late June and early July, heavy rain fell causing mountain streams to overflow and seriously damaged many roads and bridges throughout the area. A special warrant of \$2,439.00 was obtained by the Alberta Forest Service to initiate repairs to roads and bridges in the Bow River and Clearwater-Rocky areas.

The new strip were constructed in the Clearwater-Rocky Forest, Thunder Lake. The area was covered with three inches of black soil and seeded to grass. Water storage dam was constructed at Shunda Airstrip for mud bonding purposes. In the Bow River Forest the Ghost and Red Deer Airstrips were seeded and seeded to grass.

BUILDINGS

The building program entailed an expenditure of approximately \$31,490.00 which was much lower than the previous year.

In the Clearwater Forest, a stop-over cabin and 4-stall garage were constructed at Nordegg Ranger Station. Aurora Lookout was constructed and Baldy Lookout Cabin was replaced with a new structure.

In the Crowsnest Forest, a new cottage was constructed at Castle Ranger Station. A stop-over cabin and cache were constructed at Streeter Basin.

MAINTENANCE

The road maintenance program in the Rocky Mountains Forest Reserve has increased each year. The Forestry Trunk Road is maintained to a good standard. In line with the policy of consistent improvement, 81 miles of the Trunk Road were re-ditched and gravelled with crushed material.

Secondary roads received the usual maintenance but to a lesser degree than the Trunk Road.

Regular building maintenance was carried out at all ranger stations in the Forest Reserve.

The building program entailed an expenditure of approximately \$2,400,000, which is much lower than the previous year.

In the Clearwater Forest, a two-story cabin and a fuel garage were constructed at Kings River Ranger Station. A new boxcar was constructed and Johny Lookout Cabin was replaced with a new structure.

In the Crown Point Forest, a new cottage was constructed at Castle Ranger Station. A step-over cabin and cache were constructed at Steamer Basin.

MAINTENANCE

The road maintenance program in the Rocky Mountain Forest Reserve has increased each year. The Forest Service Road is maintained to a good standard. In line with the policy of consistent improvement, 31 miles of the Truck Road were re-ditched and gravelled with crushed material.

Secondary roads received the usual maintenance but to a lesser degree than the Truck Road.

Regular building maintenance was carried out at all ranger stations in the Forest Reserve.

It is estimated that the total cost of the program for the year 1934 was approximately \$2,400,000.

ACCOUNTING

The statements included in this section of the report reflect the revenue derived by the Alberta Forest Service from surface rights in the Conservation Area and expenditures by the Board and the Province for the maintenance and administration of the Rocky Mountains Forest Reserve.

REVENUE

Revenue from surface rights amounted to \$428,517.11, a decrease of \$49,131.78 from the previous year. Details of revenues are summarized hereunder:

	<u>1964-65</u>	<u>1965-66</u>
Grazing Permits, Taxes and Revenue Permits	\$ 75,714.84	\$ 63,552.86
Hay Permits, Fees, Dues, Etc.	15.00	26.00
Miscellaneous Leases	1,787.54	1,621.69
Sundry Revenue	165.16	132.00
Timber Permits	15,439.39	12,375.50
Special Timber Permits	2,804.94	95.35
Timber Fees, Rental, Etc.	17,715.12	17,581.43
Timber Dues	362,908.78	332,136.98
Right-of-Entry	1,008.12	995.30
Administrative Sundry Revenue	90.00	-
	<u>\$ 477,648.89</u>	<u>\$ 428,517.11</u>

EXPENDITURE

Operating expenses of the Board amounted to \$67,580.59 provided by the Province of Alberta under vote 1819 as detailed hereunder:

ACCOUNTING

The statements included in this section of the report reflect the revenue derived by the Alberta Forest Service from surface rights in the Crown-own Area and expenditure of the Board and the Province for the maintenance and administration of the Rocky Mountain Forest Reserve.

REVENUE

Revenue from surface rights amounted to \$428,317.11, a decrease of \$49,131.75 from the previous year. Details of revenues are summarized hereunder:

1963-64	1962-63	
\$ 63,552.82	\$ 75,714.84	Grossing Permits, Taxes and Revenue Permits
26.00	15.00	Tray Permits, Fees, Dues, Etc.
1,651.69	1,787.24	Wildlife License Fees
132.50	165.18	Sundry Revenue
12,375.25	15,439.39	Timber Permits
95.35	2,804.94	Special Timber Permits
17,587.43	17,715.15	Timber Fees, Rental, Etc.
352,134.28	362,908.78	Timber Dues
995.30	1,008.12	Right-of-Entry
		Administrative
	70.00	Sundry Revenue
<u>\$ 428,317.11</u>	<u>\$ 477,548.89</u>	

EXPENDITURE

Operating expenses of the Board amounted to \$67,580.59 provided by the Province of Alberta under vote 1819 as detailed hereunder:

	<u>General Administrative</u>	<u>Watershed Research</u>	<u>Total Expenditure</u>
Automobiles, Trucks	426.96	--	426.96
Mobile Equipment -			
Operation	870.33	794.46	1,664.79
Compensation	9.90	--	9.90
Fees and Commissions	1,035.00	6.50	1,041.50
Freight, Express & Cartage	6.20	108.60	114.80
Furnishings, Equipment, Etc.	65.40	--	65.40
Insurance Premiums	31.25	--	31.25
Materials & Supplies -			
Administrative & Operating	1,312.06	972.77	2,284.83
Construction & Maintenance	18.41	709.25	727.66
Pension Contributions -			
Annuities	225.00	--	225.00
Postage	125.00		125.00
Rentals of Equipment	345.00	822.50	1,167.50
Repairs to Equipment			
& Furnishings	--	127.58	127.58
Repair of Office Machines	24.26	--	24.26
Contributions to Canada			
Pension Plan	197.64	--	197.64
Telephone & Telegraph	416.95	--	416.95
Travelling Expenses	2,009.61	2,209.29	4,218.90
Utilities	12.50	--	12.50
Salaries & Wages	54,698.17	--	54,698.17
	<u>\$ 61,829.64</u>	<u>\$5,750.95</u>	<u>\$ 67,580.59</u>

A current account is maintained with the Royal Bank of Canada, Calgary, Alberta, from which the Board disburses its administrative expense. All expenditures by the Board are audited monthly by the Provincial Auditor.

Expenditure for the maintenance and administration of the Conservation Area, including the expenses of the Board, provided by the Province of Alberta in accordance with Section 2 (a) (11) of the Memorandum of Agreement between the Government of Canada and the Government of the Province of Alberta amounted to \$1,302,699.89 for the fiscal year under review.

For financial details see Appendix "C",
Statements "A", "B", and "C".

WORKMEN'S
COMPENSATION

The Board's Deposit of \$5,000.00 with
the Alberta Workmen's Compensation
Board earned interest of \$231.52 less
administrative expense and reserve for rehabilitation and enhanced
disabilities of \$119.00, leaving a net credit to Proprietary Equity of
\$112.52.

Claims for injuries sustained by temporary
Board field staff (non-civil servants) amounted to \$9.90 during the year
under review.

ESTIMATES
FISCAL YEAR
1966-67

Estimates for the administration of the
Board for the fiscal year 1966-67 in the
amount of \$80,500.00 were approved by
the Legislature of the Province of
Alberta under Appropriation No. 1819.

for financial details see Appendix "C".

Statements "A", "B", and "C".

WORKMEN'S

COMPENSATION

The Board's Deposit of \$5,000.00 with the Alberta Workmen's Compensation Board earned interest of \$231.52 less

administrative expense and reserve for rehabilitation and enhanced disability of \$119.00, leaving a net credit to the Treasury Fund of

\$212.52.

Claims for injuries sustained by temporary Board field staff (non-civil servants) amounted to \$9.90 during the year

under review.

ESTIMATES

FISCAL YEAR

1965-66

Estimates for the administration of the Board for the fiscal year 1965-66 in the amount of \$80,500.00 were approved by the Legislature of the Province of

Alberta under Appropriation No. 1819.

DISTRIBUTION OF ALBERTA FOREST SERVICE PERSONNEL

FISCAL YEAR 1965-66

	Rocky Mountains Forest Reserve-Calgary Office	Crowsnest Forest	Bow River Forest	Clearwater- Rocky Forest	TOTALS
<u>Permanent Staff</u>					
Forest Superintendents	-	1	1	1	3
Fire Control Officers	-	1	1	1	3
Foresters	-	1	1	1	3
Chief Rangers	-	1	1	1	3
Forest Management Technicians	-	-	-	1	1
District Rangers	-	5	7	8	20
Land Use Officers	-	1	-	1	2
Assistant Rangers	-	4	9	6	19
Clerks	1	1	1	1	4
Stenographers and Typists	1	1	2	3	7
Radio Operators	-	1	1	1	3
Carpenters	-	-	1	1	2
Maintenance Foremen - Buildings	-	-	-	-	-
- Mechanical	1	-	-	1	1
- Roads	1	1	1	1	2
Mechanical Foremen	1	-	-	-	1
Garage Mechanics	2	-	-	-	2
Gradersmen	-	1	1	1	3
Warehousemen	1	-	1	1	3
Automotive Equipment Operators	-	1	1	2	4
Lookoutmen - Permanent	8	20	29	32	89
	-	6	9	8	23
Lookoutmen - Seasonal	8	26	38	40	112

GRAZING

The number of domestic animals grazed under permit as compared with the previous year is given below.

	Crowsnest Forest		Bow River Forest		Clearwater Forest		Forest Reserve	
	1964	1965	1964	1965	1964	1965	1964	1965
Cattle	15,809	14,467	9,197	8,953	1,152	1,341	26,158	24,761
Sheep	820	975	-	-	-	-	820	975
Horses*	-	-	317	307	222	162	539	469
Total	16,629	15,442	9,514	9,260	1,374	1,503	27,517	26,205
Actual Use in A.U.M.**	51,955	49,291	36,669	31,850	7,333	7,123	95,957	88,264
No. of Permits	188	189	96	93	27	25	311	307
Revenue	\$44,038.80	\$36,485.40	\$29,154.70	\$24,063.06	\$4,183.67	\$4,107.34	\$77,377.17	\$64,655.80

* An additional 633 pack and saddle horses were brought into the Reserve for varying periods.

** A.U.M. - Animal Unit Month.

The amount of forage required by one animal unit, which is equivalent to a mature cow and calf at foot, for one month.

Actual use made by horses not under permit is also included here.

GOVERNMENT OF THE PROVINCE OF ALBERTA

OFFICE OF THE PROVINCIAL AUDITOR

EDMONTON,

June 27, 1966

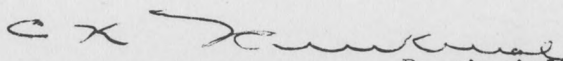
Eastern Rockies Forest Conservation Board
 CALGARY, Alberta

I have audited the books and records of the Eastern Rockies Forest Conservation Board, maintained by the Department of Lands and Forests, Government of the Province of Alberta, for the year ended March 31, 1966, and submit the following statements herewith:

<u>Statement</u>	<u>Particulars</u>
A.	Balance Sheet
B.	Statement of Maintenance Expenditure
C.	Statement of Government of Canada and Government of the Province of Alberta Equity

Total capital expenditures from inception to March 31, 1955, amounting to \$6,278,906.10 were made from funds provided by the Government of Canada (as authorized under Section 8 (a) of the Memorandum of Agreement) for the location and construction of forest improvements, the making of a forest inventory, reforestation, and such other works and services as the Board considered necessary in that area of the East Slope of the Rocky Mountains forming part of the watershed of the Saskatchewan River, as more definitely described in the Appendix to the Act. The total expenditure was not to exceed \$6,300,000.00 during the seven years ended March 31, 1955.

I certify that, in my opinion, the attached Balance Sheet is properly drawn up so as to show the true financial position of the Eastern Rockies Forest Conservation Board as at March 31, 1966, according to the information and explanations given to me and as shown by the records of the Board and the accompanying statements correctly set forth the result of transactions for the year ended at that date.

 F. C. A.
 Provincial Auditor.

Statement A

EASTERN ROCKIES FOREST CONSERVATION BOARD

BALANCE SHEET AS AT MARCH 31, 1966

ASSETS

Workmen's Compensation Board deposit	\$ 5,112.52
Value of loose tools and equipment transferred to the Province of Alberta as at April 1, 1959	173,496.38
Capital improvements and works	<u>5,716,615.20</u>
	\$ <u>5,895,224.10</u>

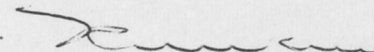
LIABILITIES

Government of Canada and Government of the Province of Alberta, equity as per Statement C	\$ <u>5,895,224.10</u>
--	------------------------

Note: Section 20 of the Memorandum of Agreement set forth in the Schedules to Chapter 59, Statutes of Canada, 1947 and Chapter 20, Statutes of Alberta, 1948 and Amendment Acts, 1957 provides that upon termination of the Agreement:

- (a) All improvements or works resulting from the carrying out of the programs of the Board shall belong to the Province.
- (b) All other property acquired by the Board shall belong to the Province.

This is the Balance Sheet referred to in my report of June 27, 1966, addressed to the Eastern Rockies Forest Conservation Board.

C. X.  F. C. A.
Provincial Auditor.

EASTERN ROCKIES FOREST CONSERVATION BOARD

STATEMENT OF MAINTENANCE EXPENDITURE

FOR THE YEAR ENDED MARCH 31, 1966

Maintenance expenses:		
Salaries	\$ 482,081.26	
Wages	241,862.62	
Rentals	142,960.17	
Equipment and motor vehicle expense	117,564.92	
Maintenance, material and operation expense	108,261.00	
Travelling	41,973.26	
Administration and general expense	28,672.71	
Heat, light and power	14,408.10	
Freight, express and cartage	8,713.35	
Telegrams and telephones	4,262.30	
Postage	1,284.49	
Honorarium	1,000.00	
Pensions	422.64	
Advertising	107.88	
Insurance	31.25	
Compensation	9.90	
		\$ 1,193,615.85
Automobiles, trucks and mobile equipment		105,893.11
Furnishings, equipment and tools		3,190.93
		<u>\$ 1,302,699.89</u>
Provided by:		
Appropriations 1815, 1819 and 1821		\$ 1,302,699.89

Note: The total amount expended by the Board was provided by the Government of the Province of Alberta in accordance with Section 2 (a) (ii) of the Memorandum of Agreement, dated June 17, 1953, between the Government of Canada and the Government of the Province of Alberta as set forth in the Schedules to Chapter 41, Statutes of Canada, 1952, and Chapter 36, Statutes of Alberta, 1953.

The remuneration and expenses of members of the Board were paid by the Governments of Canada and the Province of Alberta in accordance with Section 2 (b) (iii) of the Memorandum of Agreement. The amounts paid by the Province of Alberta, including the honorarium of \$1,000.00 to A. T. Baker, have been incorporated into the above statement.

Statement C

EASTERN ROCKIES FOREST CONSERVATION BOARD
STATEMENT OF GOVERNMENT OF CANADA AND GOVERNMENT
OF THE PROVINCE OF ALBERTA EQUITY
FOR THE YEAR ENDED MARCH 31, 1966

Balance as at April 1, 1965	\$ 5,895,243.58
Add:	
Workmen's Compensation Board deposit interest	112.52
	<hr/>
	\$ 5,895,356.10
Deduct:	
Workmen's Compensation Board interest remitted	132.00
	<hr/>
Government of Canada and Government of the Province of Alberta equity as at March 31, 1966	\$ 5,895,224.10
	<hr/> <hr/>

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EASTERN ROCKIES FOREST
CONSERVATION BOARD
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